



HUNTON & WILLIAMS LLP
1900 K STREET, N.W.
WASHINGTON, D.C. 20006-1109

TEL 202 • 955 • 1500
FAX 202 • 778 • 2201

DAVID H. MILLIGAN
DIRECT DIAL: 202 • 955 • 1687
EMAIL: dmilligan@hunton.com

03945 U.S. PTO
10/649952
08/28/03

August 28, 2003

UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket Number: **58777.000013**

First Named Inventor: **Kenju MIURA, et al.**

Title: **PROMOTERS OF THE GROWTH AND/OR DIFFERENTIATION OF
HEMATOPOIETIC STEM CELLS AND/OR HEMATOPOIETIC PROGENITORS**

TO: **Mail Stop Patent Application**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

Attached are the following for filing with the U.S. Patent and Trademark Office:

1. ☒ Fee Transmittal Form (original and duplicate)
2. ☐ Small Entity Status Claimed: ☐ Independent Inventor
☐ Small Business Concern
☐ Non-Profit Organization
- ☐ Statement Enclosed
- ☐ Statement Filed in Prior Application; Status Still Proper and Desired
3. ☒ Specification - Total Pages: 44 (Including Abstract)

CLAIMS AS FILED						
	Claims Filed	Basic Fee Claims	Extra	Rate		Amount
				Large Entity	Small Entity	
Total Claims	20	20		\$ 18.00	\$ 9.00	\$0.00
Independent Claims	5	3	2	\$ 84.00	\$ 42.00	\$168.00
First Presentation of Multiple Dependent Claims				\$ 280.00	\$ 140.00	\$0.00
BASIC FEE				\$ 750.00	\$ 375.00	\$750.00
TOTAL FILING FEE						\$0.00
Assignment Recordation Fee						\$0.00
TOTAL AMOUNT ENCLOSED						\$918.00

4. ☒ Drawings - Total Sheets: 10 (Fig(s). 1-9)

ATLANTA AUSTIN BANGKOK BRUSSELS CHARLOTTE DALLAS HONG KONG KNOXVILLE
LONDON MCLEAN MIAMI NEW YORK NORFOLK RALEIGH RICHMOND SINGAPORE WASHINGTON
www.hunton.com

BOX PATENT APPLICATION

August 28, 2003

Page 2

5. Oath or Declaration - Total Pages: 3
- a. ☐ Newly executed (original or copy)
☒ New (unexecuted)
- b. ☐ Copy from a prior application
(for continuation/divisional with Box 18 completed)
- i. ☐ **DELETION OF INVENTOR(s):**
Signed statement attached deleting inventor(s) named in prior application.
6. ☐ Application Data Sheet
7. ☐ CD-ROM or CD-R in duplicate, large table or Microfiche Computer Program (Appendix)
8. ☒ Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☒ Computer Readable Form (CRF)
- b. ☒ Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (two copies); or
- ii. ☒ Paper Copy (identical to computer copy)
- c. ☒ Statement verifying identity of above copy
9. ☒ Assignee/Applicant:

DAIICHI SUNTORY PHARMA CO., LTD.
5-7-2, Kojimachi, Chiyoda-ku,
Tokyo 102-0083 JAPAN

DAIICHI SUNTORY BIOMEDICAL
RESEARCH, LTD.
1-1, Wakayamadai, Shimamoto-cho,
Mishima-gun, Osaka, 618-8503 JAPAN



BOX PATENT APPLICATION

August 28, 2003

Page 3

☐ Assignee of Record in Prior Application No. _____ :

recorded on _____ at Reel _____, Frame _____.

10. ☐ 37 C.F.R. 3.73(b) Statement ☐ Power of Attorney

11. ☐ English Translation Document (if applicable)

12. ☐ Information Disclosure Statement with PTO-1449 and References

☐ Copies of Information Disclosure Statement Citations

13. ☐ Preliminary Amendment

14. ☒ Return Receipt Postcard

15. ☒ Priority is Claimed as Follows:

PCT/JP02/13862, filed on December 27, 2002

Japanese Application No. 400330/2001, filed on December 28, 2001

☐ If Foreign Priority is Claimed, Certified Copy of the Above Priority Document(s) is Submitted Herewith

16. ☐ Nonpublication Request under 35 U.S.C. § 1222(b)(2)(B)(i). Applicant must attach Form PTO/SB/35 or its equivalent.

17. ☐ Other: _____

18. ☒ Continuation ☐ Divisional ☐ Continuation-in-Part of
Prior Application No.: PCT/JP02/13862 filed December 27, 2002

Prior application information: Examiner _____ Group Art Unit _____

☐ Incorporation By Reference (useable if Box 5b is marked)

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 5b, is considered as being part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon



BOX PATENT APPLICATION

August 28, 2003

Page 4

when a portion has been inadvertently omitted from the submitted application papers.

☐ Complete Application Based on Provisional Application No.: _____
filed _____

19. Please address all correspondence to:

☒ **CUSTOMER NUMBER** 21967

☒ **Robert M. Schulman**
Intellectual Property Department
Hunton & Williams LLP
1900 K Street, N.W.
Suite 1200
Washington, DC 20006-1109

20. ☒ A new power of attorney or authorization of agent (PTO/SB/81) is as follows:

☐ The power of attorney is to: Stanislaus Aksman, Reg. No. 28,562; Jennifer A. Albert, Reg. No. 32,012; Thomas E. Anderson, Reg. No. 37,063; David E. Baker, Reg. No. 42,285; Scott D. Balderston, Reg. No. 35,436; Carl L. Benson, Reg. No. 38,378; Thomas Blasey, Reg. No. 33,475; Bradford Blaise, Reg. No. 47,429; Thomas D. Bradshaw, Reg. No. 51,492; J. Robert Brown, Jr., Reg. No. 45,438; Tyler S. Brown, Reg. No. 36,465; Brian M. Buroker, Reg. No. 39,125; Christopher C. Campbell, Reg. No. 37,291; Katherine S. Chang, Reg. No. 40,544; Robin C. Clark, Reg. No. 40,956; Trevor Q. Coddington, Reg. No. 46,633; Christopher J. Cuneo, Reg. No. 42,450; Ryan S. Davidson, Reg. No. 51,596; Patrick A. Doody, Reg. No. 35,022; Dinnatia J. Doster, Reg. No. 45,268; Kevin T. Duncan, Reg. No. 41,495; Kevin J. Dunleavy, Reg. No. 32,024; David D'Zurilla, Reg. No. 36,776; Ozzie A. Farres, Reg. No. 43,606; Nancy J. Flint, Reg. No. 46,704; Christopher J. Forstner, Reg. No. 46,049; James G. Gatto, Reg. No. 32,694; George Georgellis, Reg. No. 43,632; Charles F. Hollis, III, Reg. No. 40,650; David M. Huntley, Reg. No. 40,309; Nancy J. Jensen, Reg. No. 45,913; Herbert V. Kerner, Reg. No. 42,721; Steven P. Klocinski, Reg. No. 39,251; Robert C. Lampe, III, Reg. No. 51,914; Jonathan D. Link, Reg. No. 41,548; Charles B. Lobsenz, Reg. No. 37,857; Tyler Maddry, Reg. No. 40,074; J. Michael Martinez, Reg. No. 37,178; David H. Milligan, Reg. No. 42,893; James R. Miner, Reg. No. 40,444; Bryan F. Moore, Reg. No. 52,044; Devin S. Morgan, Reg. No. 45,562; Kerry H. Owens, Reg.

BOX PATENT APPLICATION

August 28, 2003

Page 5

No. 37,412; Jeffrey T. Perez, Reg. No. 52,110; Michael P.F. Phelps, Reg. No. 48,654; John P. Pinkerton, Reg. No. 28,746; Laurence H. Posorske, Reg. No. 34,698; Matthew J. Pryor, Reg. No. 45,278; Andrew J. Ririe, Reg. No. 45,597; Stephen T. Schreiner, Reg. No. 43,097; Robert M. Schulman, Reg. No. 31,196; Thomas J. Scott, Jr., Reg. No. 27,836; Yisun Song, Reg. No. 44,487; Shelley L. Spalding, Reg. No. 51,971; Henry C. Su, Reg. No. 37,738; Rodger L. Tate, Reg. No. 27,399; Raphael A. Valencia, Reg. No. 43,216; René Vazquez, Reg. No. 38,647; Samson Vermont, Reg. No. 42,202; Robert J. Ward, Reg. No. 28,746; and Scott F. Yarnell, Reg. No. 45,245.

☐ Please remove as power of attorney: Scott D. Balderston, Reg. No. 35,436; Thomas Blasey, Reg. No. 33,475; Bradford Blaise, Reg. No. 47,429; Tyler S. Brown, Reg. No. 36,465; Dinnatia J. Doster, Reg. No. 45,268; Kevin J. Dunleavy, Reg. No. 32,024; David D'Zurilla, Reg. No. 36,776; James G. Gatto, Reg. No. 32,694; George Georgellis, Reg. No. 43,632; David M. Huntley, Reg. No. 40,309; Steven P. Klocinski, Reg. No. 39,251; Charles B. Lobsenz, Reg. No. 37,857; Devin S. Morgan, Reg. No. 45,562; Kerry H. Owens, Reg. No. 37,412; Matthew J. Pryor, Reg. No. 45,278; Stuart I. Smith, Reg. No. 42,159; Henry C. Su, Reg. No. 37,738; Raphael A. Valencia, Reg. No. 43,216; and René Vazquez, Reg. No. 38,647.

☒ Please add as power of attorney: Stanislaus Aksman, Reg. No. 28,562; Jennifer A. Albert, Reg. No. 32,012; Thomas E. Anderson, Reg. No. 37,063; David E. Baker, Reg. No. 42,285; Carl L. Benson, Reg. No. 38,378; Thomas D. Bradshaw, Reg. No. 51,492; J. Robert Brown, Jr., Reg. No. 45,438; Brian M. Buroker, Reg. No. 39,125; Christopher C. Campbell, Reg. No. 37,291; Katherine S. Chang, Reg. No. 40,544; Robin C. Clark, Reg. No. 40,956; Trevor Q. Coddington, Reg. No. 46,633; Christopher J. Cuneo, Reg. No. 42,450; Ryan S. Davidson, Reg. No. 51,596; Patrick A. Doody, Reg. No. 35,022; Kevin T. Duncan, Reg. No. 41,495; Ozzie A. Farres, Reg. No. 43,606; Nancy J. Flint, Reg. No. 46,704; Christopher J. Forstner, Reg. No. 46,049; Charles F. Hollis, III, Reg. No. 40,650; Nancy J. Jensen, Reg. No. 45,913; Herbert V. Kerner, Reg. No. 42,721; Robert C. Lampe, III, Reg. No. 51,914; Jonathan D. Link, Reg. No. 41,548; Tyler Maddry, Reg. No. 40,074; J. Michael Martinez, Reg. No. 37,178; David H. Milligan, Reg. No. 42,893; James R. Miner, Reg. No. 40,444; Bryan F. Moore, Reg. No. 52,044; Jeffrey T. Perez, Reg. No. 52,110; Michael P.F. Phelps, Reg. No. 48,654; John P. Pinkerton, Reg. No. 28,746; Laurence H. Posorske, Reg. No. 34,698; Andrew J. Ririe, Reg. No. 45,597; Stephen T. Schreiner, Reg. No. 43,097; Robert M. Schulman, Reg. No. 31,196; Thomas J. Scott, Jr., Reg. No. 27,836; Yisun Song, Reg. No. 44,487; Shelley L. Spalding, Reg. No. 51,971; Rodger L. Tate, Reg. No. 27,399;



BOX PATENT APPLICATION

August 28, 2003

Page 6

Samson Vermont, Reg. No. 42,202; Robert J. Ward, Reg. No. 28,746; and
Scott F. Yarnell, Reg. No. 45,245.

21. ☐ A check in the amount of \$ _____ is enclosed. In the event any variance exists between the amount enclosed and the Patent Office charges, please charge or credit any such variance to **Deposit Account No. 50-0206**.
- ☒ The U.S. Patent and Trademark Office is hereby authorized to charge any variance between the amount enclosed and the Patent Office charges to **Deposit Account No. 50-0206**

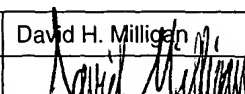
Respectfully submitted,

By:

David H. Milligan

Registration No. 42,893

DHM/cbt
Enclosures

FEE TRANSMITTAL BOX PATENT APPLICATION		<i>Complete If Known</i>																																											
		Application No.		To Be Assigned																																									
		Filing Date		August 28, 2003																																									
		First Named Inventor		Kenju MIURA																																									
		Examiner Name		To Be Assigned																																									
		Group Art Unit		To Be Assigned																																									
Total Amount Of Payment (\$)		918.00		Attorney Docket No.		58777.000013																																							
METHOD OF PAYMENT (check one)				FEE CALCULATION (continued)																																									
1. <input checked="" type="checkbox"/> The Director of the United States Patent and Trademark Office is hereby authorized to charge indicated fees and credit any over payments to Deposit Account No. 50-0206 in the name of Hunton & Williams.				3. ADDITIONAL FEES <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Fee Description</th> <th style="text-align: right;">Fee Paid</th> </tr> <tr><td><input type="checkbox"/> Surcharge - late filing fee or oath</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Surcharge - late provisional filing fee or cover sheet</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> -Month Extension of Time</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Notice of Appeal</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Filing Brief in Support of Appeal</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Request for Oral Hearing</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Utility Issue Fee (or Reissue) (including Publication Fee, if necessary)</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Design Issue Fee</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Plant Issue Fee</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Petition to Commissioner</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Petition to Revive (Unavoidable)</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Petition to Revive (Unintentional)</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Petitions Related to Provisional Applications</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Submission of Information Disclosure Statement</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Filing Submission After Final Rejection</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Recording Each Patent Assignment Per Property</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Filing Request for Reexamination</td><td style="text-align: right;">\$</td></tr> <tr><td><input type="checkbox"/> Other (specify) _____</td><td style="text-align: right;">\$</td></tr> </table>				Fee Description	Fee Paid	<input type="checkbox"/> Surcharge - late filing fee or oath	\$	<input type="checkbox"/> Surcharge - late provisional filing fee or cover sheet	\$	<input type="checkbox"/> -Month Extension of Time	\$	<input type="checkbox"/> Notice of Appeal	\$	<input type="checkbox"/> Filing Brief in Support of Appeal	\$	<input type="checkbox"/> Request for Oral Hearing	\$	<input type="checkbox"/> Utility Issue Fee (or Reissue) (including Publication Fee, if necessary)	\$	<input type="checkbox"/> Design Issue Fee	\$	<input type="checkbox"/> Plant Issue Fee	\$	<input type="checkbox"/> Petition to Commissioner	\$	<input type="checkbox"/> Petition to Revive (Unavoidable)	\$	<input type="checkbox"/> Petition to Revive (Unintentional)	\$	<input type="checkbox"/> Petitions Related to Provisional Applications	\$	<input type="checkbox"/> Submission of Information Disclosure Statement	\$	<input type="checkbox"/> Filing Submission After Final Rejection	\$	<input type="checkbox"/> Recording Each Patent Assignment Per Property	\$	<input type="checkbox"/> Filing Request for Reexamination	\$	<input type="checkbox"/> Other (specify) _____	\$
Fee Description	Fee Paid																																												
<input type="checkbox"/> Surcharge - late filing fee or oath	\$																																												
<input type="checkbox"/> Surcharge - late provisional filing fee or cover sheet	\$																																												
<input type="checkbox"/> -Month Extension of Time	\$																																												
<input type="checkbox"/> Notice of Appeal	\$																																												
<input type="checkbox"/> Filing Brief in Support of Appeal	\$																																												
<input type="checkbox"/> Request for Oral Hearing	\$																																												
<input type="checkbox"/> Utility Issue Fee (or Reissue) (including Publication Fee, if necessary)	\$																																												
<input type="checkbox"/> Design Issue Fee	\$																																												
<input type="checkbox"/> Plant Issue Fee	\$																																												
<input type="checkbox"/> Petition to Commissioner	\$																																												
<input type="checkbox"/> Petition to Revive (Unavoidable)	\$																																												
<input type="checkbox"/> Petition to Revive (Unintentional)	\$																																												
<input type="checkbox"/> Petitions Related to Provisional Applications	\$																																												
<input type="checkbox"/> Submission of Information Disclosure Statement	\$																																												
<input type="checkbox"/> Filing Submission After Final Rejection	\$																																												
<input type="checkbox"/> Recording Each Patent Assignment Per Property	\$																																												
<input type="checkbox"/> Filing Request for Reexamination	\$																																												
<input type="checkbox"/> Other (specify) _____	\$																																												
2. <input type="checkbox"/> Check Enclosed. The Director of the United States Patent and Trademark Office is hereby authorized to charge any variance between the amount enclosed and the Patent Office charges to Deposit Account No. 50-0206 in the name of Hunton & Williams, 1900 K Street, N.W., Suite 1200, Washington, D.C. 20006-1109.																																													
FEE CALCULATION																																													
1. BASIC FILING FEE <input checked="" type="checkbox"/> Large Entity <input type="checkbox"/> Small Entity																																													
				<u>FEE PAID</u>																																									
		Utility Filing Fee	\$			750.00																																							
		Design Filing Fee	\$																																										
		Plant Filing Fee	\$																																										
		Reissue Filing Fee	\$																																										
		Provisional Filing Fee	\$																																										
2. EXTRA CLAIMS FEES																																													
CLAIMS AS AMENDED																																													
For	Number Present	Highest Number Paid For	Extra	Rate		Amount																																							
				Large Entity	Small Entity																																								
TOTAL CLAIMS	20	20	0	x \$ 18.00	x \$ 9.00	\$.00																																							
INDEPENDENT CLAIMS	5	3	2	x \$ 84.00	x \$ 42.00	\$168.00																																							
MULTIPLE DEPENDENT CLAIMS				\$ 280.00	\$ 140.00	\$.00																																							
TOTAL EXTRA CLAIMS FEES						\$168.00																																							
SUBMITTED BY						Complete (if applicable)																																							
Typed or Printed Name		David H. Milligan			Registration No.	42,893																																							
Signature					Date	August 28, 2003																																							